

DOCUMENT RESUME

ED 299 388

CE 050 840

TITLE State Technical Committee Activity. A Report.
INSTITUTION Sangamon State Univ., Springfield, Ill. East Central Curriculum Management Center.
SPONS AGENCY National Network for Curriculum Coordination in Vocational and Technical Education.
PUB DATE Sep 88
NOTE 172p.; For a related document, see ED 297 168.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC07 Plus Postage.
DESCRIPTORS *Advisory Committees; *Content Analysis; *Curriculum Development; *Skill Analysis; *State Action; Statewide Planning; *Vocational Education
IDENTIFIERS Carl D Perkins Vocational Education Act 1984; *Task Lists

ABSTRACT

A study examined the activity of the state technical committees that were mandated by the Carl D. Perkins Vocational Education Act. The study's main objectives were to identify (1) the methods that individual state technical committees used to develop and verify task lists and/or skill inventories; (2) the different reasons for selecting the job area/occupation chosen; and (3) the ways in which states are implementing the task lists in their curricula. Thirty-six states, the District of Columbia, and Puerto Rico responded to the survey. The most common method of developing a task list was to compile a basic list from more than one existing list and then to verify it by a panel or committee of representatives from that job area. Few states had the same reason for selecting the job area/occupation analyzed. Reasons cited included needs assessments; economic outlook; societal problems and needs; input from business/labor, state staff, educators, enrollees; and business/labor analyses. The lists are being used for such purposes as modifying curricula, defining model curricula, developing guides, providing teacher inservice training, and selecting and developing new curriculum materials. (This document presents state-by-state responses to the survey questions in chart form, and includes a copy of the survey form.) (MN)

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State Technical Committee Activity

Prepared by
The East Central Regional
National Network for Curriculum Coordination in Vocational and Technical Education

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State Technical Committee Activity

**A report on the status of
State Technical Committee Activities**

**Prepared by
The East Central Region
National Network for Curriculum Coordination in Vocational and Technical Education**

**Printed through the Illinois Vocational Curriculum Center
September, 1988**

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Foreword

Since the passage of the Carl D. Perkins Vocational Education Act of 1984 with its State Technical Committee mandate, the East Central Region of the National Network for Curriculum Coordination in Vocational and Technical Education (NNCCVTE) has been keenly interested in its effect on vocational education curriculum.

This is the third in a series of publications on the State Technical Committees. The first two, *Technical Committees: From Concept to Action* and *State Technical Committees: State of the Art*, were produced in cooperation with the National Alliance of Business (NAB).

This publication reports on the results of a national survey conducted during 1988. It focuses on the task lists developed by the state technical committees and includes such information as stage of development, process, components, and committee makeup or representation.

Sincere appreciation is expressed to East Central Network staff contributing to the publication, Marianne Lawrence, Editorial Writer, and Dr. Ruth Patton, Assistant to the Director. More information on technical committees and specific task lists may be obtained by contacting the East Central Network, Illinois Vocational Curriculum Center, Sangamon State University, F-2, Springfield, IL 62794-9243, 217/786-6163.

Rebecca S. Douglass
Director

Activity Report

State Technical Committee Activity focuses on the task listings that have been produced as a result of state technical committee activity. These committees were organized in each state to comply with the Carl D. Perkins Vocational Education Act. The technical committee mandate combined education with business and industry in the development of curriculum.

The 1988 survey (see Appendix) was sent to vocational educators in 50 states, the District of Columbia, Guam, American Samoa, Northern Marianas, Puerto Rico, Trust Territory and the Virgin Islands. Responses in this report include 36 states, the District of Columbia and Puerto Rico.

The three main objectives of the survey are detailed as follows.

Identify methods states used to develop and verify task lists or inventory of skills.

Rarely did a state use one method for task list development/verification. The most common process used by the majority of states, was to compile a basic list from more than one existing list,

such as V-TECS, MAVCC or IDECC or a state-developed task list. The list was then verified by a panel or committee of representatives from the job area. A few states did a mail survey to verify the lists or used a combination of panel and mail survey.

Other methods used include 1) use of an existing task list (usually one developed by the state) and verifying it by a panel of job representatives or through a mail survey; 2) use of the DACUM (Developing A Curriculum) method and in some cases verifying the task list by mail survey or with input from vocational educators; 3) developing a task list by reviewing curriculum guides, receiving input from the vocational community and conducting a mail survey, then verifying the list by a panel of job representatives; or 4) conducting a mail survey and receiving input from vocational educators and advisory committees.

Identify reasons for the selection of the job area/occupation.

Few states had the same reason for selecting the job area/occupation for task development and verification. Frequently the job occupation area was selected based on a decision by a committee (state technical, advisory, program improvement or curriculum management). Most states used a

combination of data to select the job/occupation area. The following are data combinations used:

- business/labor, state staff, educators, administrators, enrollees
- business/labor analysis, technological change, curriculum need, enrollment trends
- assessments, needs, economic outlook, state council, state staff
- societal problems/needs, job availability, needs assessment
- state staff, state council, technical committee.

Examples of singular sources for data used by some states to select the job/occupation area include:

- enrollment
- business licenses
- need for updated curriculum
- state choice
- advisory committee
- lack of state uniform task lists.

Identify ways states are implementing the task lists in the curricula.

States are integrating or developing curriculum based on the task lists. In some states, task lists are used as required curriculum elements, as state

standards, state frameworks or to standardize state-developed curriculum materials. Other ways states are using the task lists include:

- modifying curriculum to reflect the technical committee report
- defining state-of-the-art model curricula
- selecting and developing new curriculum material
- providing task lists to teachers
- providing in-service workshops
- developing guides
- integrating task lists in the introduction of the suggested curriculum model
- becoming a part of the state-of-the-art system that uses a computerized curriculum generator to identify [agriculture] competencies to be taught.

Conclusion

The interpretation of the state technical committee legislative mandate varies from state to state. Survey findings reveal that nearly all states used members of the business and industry community to formulate the task lists and form the technical committees. It would then seem that the mandate's goal has been accomplished. The activity has also resulted in renewed interest in producing quality vocational education curriculum.

State Summaries

The following pages contain a summary of each state's technical committee activity. This includes two charts. One lists the name of the job area task list, its stage of development and its product components. The second chart identifies the composition of each committee, i.e., incumbent workers, supervisors, educators, etc., and the number representing each category. The chart also indicates if the committee members were involved with development (D) or verification (V).

Connecticut and New York's response to the survey revealed a unique approach to technical committee activity as set forth by the legislative mandate. Since task list information required by the survey was not received, these states are not represented in this report.

Clearinghouse

The East Central Network/Illinois Vocational Curriculum Center has become a clearinghouse for

the State Technical Committee Task Lists. This designation has the approval of the Directors' Council of the National Network for Curriculum Coordination in Vocational and Technical Education (NNCCVTE).

Not all of the task lists reported on in this survey are available from the Center. Those which are marked (+) in the charts may be requested by contacting the Center.

**Illinois Vocational Curriculum Center
East Central Network
Sangamon State University, F-2
Springfield, IL 62794-9243
217/786-6375 or
800/252-4822 (in Illinois)**

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Apprenticeship Programs		X		X	X						X	

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organizations	COVE	Other
Apprenticeship Programs	D -- 2 V -- 3	D -- 2 V -- 2	D -- 3 V -- 3	D -- 1 V -- 3			D -- 2 Dept. of Labor

Reason

Committee members decision.

Implementation

Information not available.

Method

Task list will be developed from a mail survey; study of V-TECS, state, MAVCC and ODAS task lists, business/industry materials; and existing state courses of study. The verification will be by a panel and by individual worker interviews.

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Non-Renewable Natural Resources: Tourism, Small Engine, Marine Mechanic	4/88				X							Competencies

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organizations	COVE	Other
Non-Renewable Natural Resources: Tourism, Small Engine, Marine Mechanic	V--20-30	V--10 -20					

Reason

Selection was based on business licenses including a cross section of size and location.

Implementation

The task lists are integrated into the state's model curriculum.

Method

Using another state's task list, a mail survey was conducted to verify the task list.

Organization

Alaska designates three technical committees each year for model curriculum development. Each committee has approximately 30 members.

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Automotive Technician	11/87			X	X			X	X		X	
Building Trades		X		X	X			X	X		X	Safety
Cashier/Checker Training Program	1/88			X	X				X		X	

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organizations	COVE	Other
Automotive Technician (See Method)							
Building Trades (See Method)							
Cashier/Checker Training Program	V -- 4		V -- 5	V -- 2			

Reason

Recognized the need for updated curriculum, including the latest technology in the field.

Implementation

Curriculum is developed around the task list.

Method

Automotive Technician --The National Automotive Technical Education Foundation (NATEF) task list was verified by field technicians by a process similar to DACUM. The development committee was representatives from all auto industry and educators and the task listing was verified by technicians in the field.

Building Trades --The task list by the association of General Contractors (AGC) will be verified by instructors and general contractors throughout the nation. Development was done by Oklahoma and V-TECS research and the list was verified by instructors and general contractors throughout the U.S.

Cashier/Checker Training Program --The V-TECS and MAVCC task lists will be verified.

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
General Occupational Employability Skills +	1986								X	X		

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organizations	COVE	Other
General Occupational Employability Skills		V -- 10	V -- 2				

Reason

Selection was made by the State Director of Career-Vocational Preparation.

Implementation

The task list is infused into the State Department of Education Model Curriculum Standards and frameworks for each vocational education instructional area.

Method

A state-developed and business/industry task list formed the basic task list that was developed by the DACUM process and verified by the Structured Group Interview technique.

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Accounting	X											Job Entry
Agriculture -- Production & Off Farm	3/88			X	X	X	X	X	X	X		
Air Conditioning Refrigeration		X		X		X			X	X	X	
Auto Body (Collision Repair Technician) +	2/88			X		X			X	X	X	
Auto Mechanics +	8/86			X		X			X	X	X	
Bricklaying (trowel craft) +	3/88			X		X			X	X	X	
Carpentry +	2/88			X		X			X	X	X	
Child Care Occupations		X										
Clerical	X											Job Entry
Commercial Art +	12/87			X		X			X	X	X	
Commercial Electrician +	3/88			X		X			X	X	X	
Computer Operator	X											Job Entry
Computer Programmer, Business	X											Job Entry
Drafting +	5/86			X					X	X	X	
Electronics, Technology Preparation +	2/88			X		X			X	X	X	
Graphics +	10/86			X		X			X	X	X	
Industrial Coop Education +	1988			X		X			X	X	X	

Colorado, Continued

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Management Trainee	X											Job Entry
Marketing Education *		X		X	X	X		X	X	X	X	
Microcomputer Specialist	X											Job Entry
Photography +	12/87			X		X			X	X	X	
Plumbing +	2/88			X		X			X	X	X	
Precision Machine Technology +	2/88			X		X			X	X	X	
Residential Electrician +	2/88			X		X			X	X	X	
Secretarial	X											Job Entry
Sheet Metal +	2/88			X		X			X	X	X	
Welding Technology +	2/88			X		X			X	X	X	

* The Marketing Education area includes Apparel & Accessories, Business & Personal Services, Entrepreneurship, Financial Services, Food Marketing, General Marketing, Hospitality & Recreation, Transportation & Travel, and Vehicles & Petroleum. The information is based on outlined procedures.

Colorado, Continued

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organiza- tions	COVE	Other
Accounting	D V	D	D V	D			
Agriculture -- Production & Off Farm	D -- 10 V -- 10	D -- 10 V -- 10	D -- 5 V -- 4	D -- 1 V -- 1			
Air Conditioning Refrigeration	V -- 9		V -- 2	V -- 1			
Auto Body (Collision Repair Technician)	V -- 9		V -- 2	V -- 1			
Auto Mechanics	V -- 9		V -- 2	V -- 1			
Bricklaying (trowel craft)	V -- 9		V -- 2	V -- 1			
Carpentry	V -- 9		V -- 2	V -- 1			
Child Care Occupations	D	D					
Clerical	V D	V	V D	V			
Commercial Art	V -- 9		V -- 2	V -- 1			
Commercial Electrician	D V -- 9	D	D V -- 2	D V -- 1			
Computer Operator	D V	D	D V	D			
Computer Programmer, Business	D V	D	D V	D			
Drafting	V -- 9		V -- 2	V -- 1			

Colorado, Continued

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organiza- tions	COVE	Other
Electronics, Technology Preparation	V -- 9		V -- 2	V -- 1			
Graphics	V -- 9		V -- 2	V -- 1			
Industrial Coop Education	V -- 9		V -- 2	V -- 1			
Management Trainee	D V	D	D V	D			
Marketing Education *	V -- 12						
Microcomputer Specialist	D V	D	D V	D			
Photography	V -- 9		V -- 2	V -- 1			
Plumbing	V -- 9		V -- 2	V -- 1			
Precision Machine Technology	V -- 9		V -- 2	V -- 1			
Residential Electrician	V -- 9		V -- 2	V -- 1			
Secretarial	D V	D	D V	D			
Sheet Metal	V -- 9		V -- 2	V -- 1			
Welding Technology	V -- 9		V -- 2	V -- 1			

* The Marketing Education area includes Apparel & Accessories, Business & Personal Services, Entrepreneurship, Financial Services, Food Marketing, General Marketing, Hospitality & Recreation, Transportation & Travel, and Vehicles & Petroleum. The information is based on outlined procedures.

Reason

The occupation/job area was selected as a result of lack of a state uniform task list in the area of instruction and because of the significant number of programs statewide. The following areas are exceptions:

Agriculture -- all major production and off-farm occupations common to Colorado were selected.

Child Care Occupations -- schools were surveyed to identify occupations for which students are trained.

Marketing Education -- the area was selected according to CIP classifications, demands in occupations for the state according to labor market statistics, and survey of marketing programs.

The State Technical committee selected the following areas: Accounting, Clerical, Computer Operator, Business Computer Programmer, Management Trainee, Microcomputer Specialist, Secretarial.

Implementation

The task lists were designed to be implemented as an integral part of the curriculum. Exceptions include:

Agriculture (Production and Off Farm) -- a state-of-the-art system that uses a computerized curriculum generator to identify competencies to be taught in a program based on student occupational objectives is used to implement task lists into the curriculum.

Marketing Education -- the task list is used as part of the introduction to the suggested curriculum model for Marketing Education. For the business courses, the task lists referred to as job entry competencies are minimal requirements.

Method

The majority of task lists were developed by the use of a mail survey to incumbent workers, supervisors/administrators, educators, and state staff and then verified by incumbent workers and educators.

The following areas are exceptions:

Agriculture -- a mail survey results, interviews with incumbent workers and the National Agriculture Occupations Competency Study were used to generate a basic task list. That task list was further developed and then verified by a committee composed of incumbent workers, supervisors/administrators, educators, and state staff and use of the Structure Group Interview method.

Marketing Education -- plans include use of the Structured Group Interview method to verify a basic task list compiled from IDECC and information from incumbent workers, supervisors/administrators, and educators.

Business -- business occupational areas were developed using the DACUM method then verified by incumbent workers and educators.

Delaware

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Business Education + Employability Skills, Basic Executive Secretary Information Services & Systems	10/87			X	X				X	X		
Electrical Trades	8/87				X				X	X	X	

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organizations	COVE	Other
Business Education Employability Skills, Basic Executive Secretary Information Services & Systems	V -- 7		V -- 1				
Electrical Trades	V -- 11						

Reason

Labor market demands determined selection of the areas of Business Education with emphasis on banking and financial occupations and Electrical Trades.

Implementation

Task lists become a part of the revised Delaware State Standards for Office Occupations. Teachers incorporate the electrical trades task lists in existing curriculum.

Method

Task lists from Florida, IDECC and West Virginia were compiled and verified for Business Education by the Structured Group Interview (SGI) technique which uses a panel of incumbent workers. The Electrical Trades task list was verified through the use of mail survey and SGI.

District of Columbia

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Accounting Clerk			X									
Clerk-Typist +	6/87			X	X				X	X	X	
Dental Technician	1/88			X	X				X	X	X	
Electronic Technician	3/88			X	X			X	X	X	X	
Nursing Assistant +	6/87			X	X			X	X	X	X	
Printing Press Operator	3/88			X	X				X	X	X	
Salesperson	4/88			X	X				X	X	X	

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organizations	COVE	Other
Clerk-Typist	D -- 10 V -- 2		V -- 3	V -- 1			
Dental Technician	10						
Dental Technician	12	1					
Nursing Assistant	D -- 14 V -- 2	V -- 1	V -- 1	V -- 1			
Printing Press Operator	6	2					
Salesperson	9	1*					

District of Columbia, Continued

Reason

The Technical Committee selected each of the occupational areas.

Implementation

The task lists are used as the framework for developing curriculum.

Method

All task lists are developed using the DACUM method.

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Automotive Technology +	2/87				X	X		X				
Computer Programmer												
Electronics +	10/86				X	X		X				
Human Services/Adult Care +	12/87				X	X		X				
Human Services/Child Care +	9/87				X	X		X				

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organizations	COVE	Other
Automotive Technology	D	D	D	D			
Computer Programmer	D	D	D	D			
Electronics	D	D	D	D			
Human Services/Adult Care	D	D	D	D			
Human Services/Child Care	D	D	D	D			

Reason

The Vocational Education Coordinating Advisory Committee and State Board for Vocational Education selected the occupational areas.

Implementation

Curriculum guides are developed from the inventory of skills or task lists.

Method

The task listings were developed by reviewing curriculum guides, from technical committee members' input, and by mail survey.

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Auto Body Repair	1987			X	X							
Auto Mechanics		X		X	X							
Machine Shop/Precision Machinery		X		X	X							

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organizations	COVE	Other
Auto Body Repair	V -- 5	V -- 1		V -- 1			
Auto Mechanics	V -- 6	V -- 6		V -- 2			
Machine Shop/Precision Machinery	V -- 4	V -- 1		V -- 1			

Reason for Selection

The selection was the state choice.

Implementation

Curricula are modified to reflect the technical committee report.

Method

Existing task lists including state-developed, Alabama and Oklahoma were used to form a basic task list used by the technical committee. An incumbent worker panel verified the list.

Task Listing Title (+ Available at IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Basic Employability Skills +	Rev. 5/87			X	X	X		X				
Child Care Provider/Family Day Care Home +	3/87			X	X							
Dispensing Optician +	3/87			X	X							
Infant & Toddler Care +	3/86			X	X			X				Job Title
Insurance Policy Processing Clerk/Insurance Claims Clerk +	3/87			X	X							
Materials Processing*	2/86											
Records Management Analyst +	4/88			X	X						X	X
Telephone/TV Cable Installers & Repairers +	4/88			X	X							X
Thermo Plastic Machine Set-up Specialist +	3/87			X	X							

* The Materials Processing duties and task list formed the basis for the manufacturing cluster which includes 7 occupational areas. A materials processing task list is not available.

Illinois, Continued

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organiza- tions	COVE	Other
Basic Employability Skills		V -- 23					
Child Care Provider/Family Day Care Home	V -- 8				V -- 4		V -- 1
Dispensing Optician	V -- 1	V -- 9			V -- 2		
Infant and Toddler Care	D -- 2	D -- 4	D -- 2				D -- 1
Insurance Policy Processing Clerk/Insurance Claims Clerk	V -- 5	V -- 11					
Materials Processing	V -- 3	V -- 9					
Records Management Analyst	V -- 3	V -- 7	V -- 1				
Telephone/TV Cable Installers & Repairers	V -- 5	V -- 5					V -- 1
Thermo Plastic Machine Set-up Specialist	V -- 5	V -- 3					

Reason

The occupational areas were chosen based on assessments, needs, economic outlook, and input from COVE and DAVTE state staff.

Implementation

The duties and tasks form the basis of instructional content for secondary, postsecondary and adult occupational training programs.

Method

Using an intensive structured group interview (SGI) process for verifying tasks, the technical committees developed the definitions, duties and tasks.

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Basic Skills/Proficiencies	6/87									X		
Consumer and Homemaking Education +	1987											Common Skills
Technical Forecasting		X										
Vocational Agriculture		X										

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Job Incumbents	Business/Ind.	Educators	St. Staff	Organizations	COVE	Other
Basic Skills/Proficiencies			10				1
Consumer and Homemaking Education	D -- 3	D -- 1	D -- 10		D -- 5		3 social sve 1 student
Standing Technical Committee			3	1	2	1	1--labor
Technical Forecasting		7					1
Vocational Agriculture	3	6	6				1--student

Organization

The state of Indiana has a Technical Committee for Curriculum Development and Review (Standing Technical Committee) and the following ad hoc technical committees: Technology Forecasting Task Force; Vocational Agriculture; Foundation Proficiencies/Basic Competencies; Consumer and Homemaking.

The objectives of the Standing Technical Committee are 1) examine the current labor market supply and demand for determining occupational areas in need of curriculum development or improvement, and 2) coordinate the development of an inventory of skills from available resources for use in defining state of the art model curricula. The goal of the Standing Technical Committee and all the ad hoc technical committees is a stronger curriculum for vocational-technical education programs for use at the secondary, postsecondary and adult levels which address labor market and individual student needs.

Note: The Indiana Commission on Vocational & Technical Education Report is available from the IVCC/ECN.

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Natural Resources		X										Competencies

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organizations	COVE	Other
Natural Resources	D -- 2	D -- 6	D -- 2	D -- 2			

Reason

The occupational/job area was recommended by the Vocational and Technical Agriculture Program Improvement Cadre.

Implementation

The task lists are used when selecting and developing new curriculum materials.

Method

Information not available.

Kansas

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Account Clerk +	1988			X	X	X						X
Administrative Secretary +	1988			X	X	X						X
Agricultural Electrification, Power & Control Worker +	1988			X	X	X						X
Agricultural Mechanics Construction & Maintenance Skill Worker +	1988			X	X	X						X
Agricultural Power Machinery Worker +	1988			X	X	X						X
Agricultural Structures, Equipment & Facilities Worker	1988			X	X	X						X
Animal Science +	1988			X	X	X						X
Auto Body Repair Technician +	1988			X	X	X						X
Automotive Technician +	1988			X	X	X						X
Carpenter +	1988			X	X	X						X
Cattle Rancher +	1988			X	X	X						X
Certified Nurses Aide +	1988			X	X	X						X
Child Care Worker +	1988			X	X	X						X
Cosmetologist +	1988			X	X	X						X
Data Entry Operator +	1988			X	X	X						X
Data Entry Specialist +	1988			X	X	X						X
Dental Assistant +	1988			X	X	X						X

Kansas, Continued

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Diesel Mechanic +	1988			X	X	X						X
Electrician +	1988			X	X	X						X
Emergency Medical Technician		X										
Employability Skills	1988			X	X	X						X
Farm Manager, General +	1988			X	X	X						X
Fashion Merchandise Associate +	1988			X	X	X						X
Fertilizer/Chemical Service Worker +	1988			X	X	X						X
Floriculture Worker/Retail Flower Shop Salesperson +	1988			X	X	X						X
Food Marketing Manager/Supervisor +	1988			X	X	X						X
Grain Farmer +	1988			X	X	X						X
Graphic Communications +	1988			X	X	X						X
Heating, Ventilation, Air Conditioning & Refrigeration Technician +	1988			X	X	X						X
Information Specialist/Secretarial +	1988			X	X	X						X
Mechanical Drafting +	1988			X	X	X						X
Medical Laboratory Technician +	1988			X	X	X						X
Medication Aide +	1988			X	X	X						X
Mental Health Technician +	1988			X	X	X						X

Kansas, Continued

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Office Support Clerk +	1988			X	X	X						X
Paramedic +	1988			X	X	X						X
Physical Therapist Assistant +		X										
Plant and Soil Science +	1988			X	X	X						X
Practical Nursing +	1988			X	X	X						X
Respiratory Therapy +	1988			X	X	X						X
Salesperson, Animal Feed Products +	1988			X	X	X						X
Salesperson, Farm Equipment & Supplies +	1988			X	X	X						X
Soil & Water Mechanical Worker +	1988			X	X	X						X
Swine Farmer +	1988			X	X	X						X
Terminal System Operator +	1988			X	X	X						X
Welder +	1988			X	X	X						X

Committee Representation and Process

The technical committees are composed of five business/industry representatives and one educator. Incumbent workers make up the population for the mail survey.

Reason

Selection based on the heaviest enrollment in courses and programs.

Implementation

Kansas provides inservice sessions during the state vocational conferences to assist teachers in implementing the task lists (occupational profiles) in the curriculum.

Method

Other states were surveyed and their task lists were used or compiled into one (depending on time). The technical committee used the task lists to modify, according to Kansas needs, into an entry level profile. The profile (task list) was verified by a survey sent to incumbent workers.

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Secondary:												
Computer Aided Manufacturing		X		X	X							*
Computer Graphics		X		X	X							*
Construction Design and Planning		X		X	X							*
Construction Systems		X		X	X							*
Drafting, General		X		X	X							*
Electricity and Electronics, General		X		X	X							*
Electronic Communications Systems		X		X	X							*
Electronic Systems, Advanced		X		X	X							*
Engineering Fields, Survey of		X		X	X							*
Graphic Arts, General		X		X	X							*
Industrial Communications		X		X	X							*
Industrial Materials & Processes		X		X	X							*
Manufacturing Products Design & Planning		X		X	X							*
Manufacturing Systems		X		X	X							*
Metals, General		X		X	X							*
Photographic Processes		X		X	X							*
Power and Energy		X		X	X							*
Power Mechanics, General		X		X	X							*
Production		X		X	X							*

* Instructional Sequencing

Kentucky, Continued

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Technology, Survey of		X		X	X							*
Transportation Systems		X		X	X							*
Woods, General		X		X	X							*
Postsecondary:												
Accounting I		X		X	X							*
Accounting II		X		X	X							*
Air Conditioning		X		X	X							*
Appliance Repair		X		X	X							*
Applied Economics		X		X	X							*
Auto Body Repair		X		X	X							*
Auto Mechanics		X		X	X							*
Barbering		X		X	X							*
Biomedical Equipment Technician		X		X	X							*
Business Communications		X		X	X							*
Business Economics		X		X	X							*
Business, Introduction		X		X	X							*
Business Law		X		X	X							*
Business Management		X		X	X							*
Business/Marketing Exploration		X		X	X							*
Business Mathematics		X		X	X							*

* Instructional sequencing

Kentucky, Continued

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Carpentry		X		X	X							*
Civil & Highway Technology		X		X	X							*
Commercial Art		X		X	X							*
Commercial Foods		X		X	X							*
Computer Applications, Introduction		X		X	X							*
Consumer Education		X		X	X							*
Consumer Mathematics		X		X	X							*
Cosmetology		X		X	X							*
Counter Server: Fast Food		X		X	X							*
Data Processing I		X		X	X							*
Data Processing II		X		X	X							*
Dental Assisting		X		X	X							*
Department Store Credit Clerk		X		X	X							*
Diesel Mechanics		X		X	X							*
Drafting		X		X	X							*
Electricity		X		X	X							*
Electronics		X		X	X							*
Entrepreneurship		X		X	X							*
Fashion Merchandising		X		X	X							*
Food Marketing		X		X	X							*

* Instructional sequencing

Kentucky, Continued

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Full Service Restaurant Worker		X		X	X							*
Graphic Arts		X		X	X							*
Heavy Equipment Operator		X		X	X							*
Heavy Equipment Repair		X		X	X							*
Horticulture		X		X	X							*
Legal Terminology		X		X	X							*
Legal Typewriting		X		X	X							*
Machine Shop		X		X	X							*
Marine Maintenance		X		X	X							*
Masonry		X		X	X							*
Meat Cutting		X		X	X							*
Medical Assisting		X		X	X							*
Medical Laboratory Technician		X		X	X							*
Medical Secretary		X		X	X							*
Medical Terminology		X		X	X							*
Mine Equipment Operator		X		X	X							*
Mine Maintenance Technology Industrial Machine Maintenance		X		X	X							*
Model Office, Office Procedures, Cooperative		X		X	X							*
Office Education		X		X	X							*

Kentucky, Continued

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Plumbing		X		X	X							*
Radiologic Technology		X		X	X							*
Respiratory Therapy Technician		X		X	X							*
Sheet Metal		X		X	X							*
Small Engine Repair		X		X	X							*
Surgical Technology		X		X	X							*
Tailoring		X		X	X							*
Technical Terminology		X		X	X							*
Typing I		X		X	X							*
Typing II		X		X	X							*
Upholstery		X		X	X							*
Welding		X		X	X							*
Word Processing I		X		X	X							*
Word Processing II		X		X	X							*

Instructional sequencing

Reason

The decision was made to revise all of the Kentucky vocational education task lists.

Implementation

In Kentucky task lists serve as foundations for the development of competency based vocational education curriculum.

Method

Both V-TECS and Kentucky task lists were verified by a mail survey and panel of incumbent workers.

Committee Representation

Information is not available.

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Air Conditioning/Refrigeration	9/87			X	X	X	X	X	X	X		
Appliance Repair	9/87			X	X	X	X	X	X	X		
Architectural Drafting	9/87			X	X	X	X	X	X	X		
Auto Body Repair	9/87			X	X	X	X	X	X	X		
Automotive Technician	9/87			X	X	X	X	X	X	X		
Aviation Maintenance Technology	9/87			X	X	X	X	X	X	X		
Band and Circular Saw Filing	9/87			X	X	X	X	X	X	X		
Barbering	9/87			X	X	X	X	X	X	X		
Basic Drafting	9/87			X	X	X	X	X	X	X		
Biomedical Equipment Technology	9/87			X	X	X	X	X	X	X		
Carpentry	9/87			X	X	X	X	X	X	X		
Child Care	9/87			X	X	X	X	X	X	X		
Civil Engineering Technology	9/87			X	X	X	X	X	X	X		
Civil/Map Drafting	9/87			X	X	X	X	X	X	X		
Commercial Art	9/87			X	X	X	X	X	X	X		
Commercial Sewing	9/87			X	X	X	X	X	X	X		
Communications Electronics	9/87			X	X	X	X	X	X	X		
Computer Electronics	9/87			X	X	X	X	X	X	X		
Consumer Electronics Technician	9/87			X	X	X	X	X	X	X		
Cosmetology	9/87			X	X	X	X	X	X	X		

Louisiana, Continued

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Culinary Occupations	9/87			X	X	X	X	X	X	X		
Data Processing	9/87			X	X	X	X	X	X	X		
Diesel Mechanics	9/87			X	X	X	X	X	X	X		
Dietary Manager	9/87			X	X	X	X	X	X	X		
Drafting (Disciplines & Advanced CAD, Introduction)	9/87			X	X	X	X	X	X	X		
Electrical Systems Drafting	9/87			X	X	X	X	X	X	X		
Electrician	9/87			X	X	X	X	X	X	X		
Electromechanical Technology	9/87			X	X	X	X	X	X	X		
Electronics (First Year)	9/87			X	X	X	X	X	X	X		
Emergency Medical Technician (EMT) Paramedic	9/87			X	X	X	X	X	X	X		
Forest Technology	9/87			X	X	X	X	X	X	X		
Graphic Arts	9/87			X	X	X	X	X	X	X		
Heavy Equipment Mechanic	9/87			X	X	X	X	X	X	X		
Heavy Equipment Operator	9/87			X	X	X	X	X	X	X		
Homemaker's Aide	9/87			X	X	X	X	X	X	X		
Horticulture	9/87			X	X	X	X	X	X	X		
Hospitality and Tourism	9/87			X	X	X	X	X	X	X		
Industrial Electronics	9/87			X	X	X	X	X	X	X		

Louisiana, Continued

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Industrial Machine Shop	9/87			X	X	X	X	X	X	X		
Industrial Maintenance Technician	9/87			X	X	X	X	X	X	X		
Instrumentation	9/87			X	X	X	X	X	X	X		
Jewelry Technology	9/87			X	X	X	X	X	X	X		
Manufacturing Drafting	9/87			X	X	X	X	X	X	X		
Marine Drafting	9/87			X	X	X	X	X	X	X		
Marine Operations	9/87			X	X	X	X	X	X	X		
Masonry	9/87			X	X	X	X	X	X	X		
Meat Processing	9/87			X	X	X	X	X	X	X		
Medical Laboratory Technician	9/87			X	X	X	X	X	X	X		
Motor Vessel Engineer	9/87			X	X	X	X	X	X	X		
Nondestructive Testing	9/87			X	X	X	X	X	X	X		
Nurse Assistant	9/87			X	X	X	X	X	X	X		
Office Equipment Repair	9/87			X	X	X	X	X	X	X		
Office Occupations	9/87			X	X	X	X	X	X	X		
Outdoor Power Equipment Technician	9/87			X	X	X	X	X	X	X		
Pipefitting	9/87			X	X	X	X	X	X	X		
Piping Drafting	9/87			X	X	X	X	X	X	X		

Louisiana, Continued

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Plumbing	9/87			X	X	X	X	X	X	X		
Power Line Technician	9/87			X	X	X	X	X	X	X		
Practical Nursing	9/87			X	X	X	X	X	X	X		
Process Technician	9/87			X	X	X	X	X	X	X		
Respiratory Therapy Technician	9/87			X	X	X	X	X	X	X		
Salesmanship, Marketing	9/87			X	X	X	X	X	X	X		
Structural Drafting	9/87			X	X	X	X	X	X	X		
Surgical Technology	9/87			X	X	X	X	X	X	X		
Television Production	9/87			X	X	X	X	X	X	X		
Truck Driving	9/87			X	X	X	X	X	X	X		
Upholstering	9/87			X	X	X	X	X	X	X		
Ward Clerk	9/87			X	X	X	X	X	X	X		
Welding	9/87			X	X	X	X	X	X	X		

Louisiana, Continued

Task Listing Title (All Were Verified)	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organiza- tions	COVE	Other
Air Conditioning/Refrigeration	3	1	2	1			2
Appliance Repair	1	1	1	1			2
Architectural Drafting		4	1	1			1
Auto Body Repair	1	1	1	1			1
Automotive Technician		5	1	1			1
Aviation Maintenance Technology		2	1	1			1
Band and Circular Saw Filing		2	1	1		1	2
Barbering		4	1	1			2
Basic Drafting	1	2	3	1			1
Biomedical Equipment Technology	2	5	1	1			1
Carpentry		2	1	1			2
Child Care		5	3	1			1
Civil Engineering Technology	4	1	1	1			1
Civil/Map Drafting	3		1	1			1
Commercial Art	1	3	2	2			1
Commercial Sewing	1	1	2	1			2
Communications Electronics	3		2	1			1
Computer Electronics	2		2	1			2
Consumer Electronics Technician	3	2	2	1			1
Cosmetology	2	1	1	1			2

Louisiana, Continued

Task Listing Title (All Were Verified)	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organiza- tions	COVE	Other
Culinary Occupations	2	2	2	1			1
Data Processing	1	5	1	1			1
Diesel Mechanics		2	1	1			1
Dietary Manager		3	2	1			1
Drafting (Disciplines & Advanced CAD, Introduction)	2	4	4	1			1
Electrical Systems Drafting	1	1	1	1			1
Electrician	2	2	2	1			2
Electromechanical Technology	1		1	1			2
Electronics (First Year)		2	1	1			1
Emergency Medical Technician (EMT) Paramedic		3	1	1			2
Forest Technology	3		2	1			1
Graphic Arts		2	1	2			1
Heavy Equipment Mechanic		4	1	1			1
Heavy Equipment Operator	2	4	1	1			1
Homemaker's Aide		3	1	1			1
Horticulture		2	2	1			2
Hospitality and Tourism		6	1	1			1
Industrial Electronics		2	1	1			1

Louisiana, Continued

Task Listing Title (All Were Verified)	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organiza- tions	COVE	Other
Industrial Machine Shop	1	3	3	1			1
Industrial Maintenance Technician		4		1			1
Instrumentation	3	2	3	1			2
Jewelry Technology	1	1	1	1			1
Manufacturing Drafting		3	1	1			1
Marine Drafting		3	1				1
Marine Operations	3	5	1	1			1
Masonry		1	1	1			1
Meat Processing	1	2	2	1			1
Medical Laboratory Technician	2	1	2	1			2
Motor Vessel Engineer	4	4	1	1			1
Nondestructive Testing		1	1	1			2
Nurse Assistant	3	2	1	1			1
Office Equipment Repair	2	2	1	1			1
Office Occupations	1	7	2	2			1
Outdoor Power Equipment Technician		4		1			1
Pipefitting	1	1	1	1			2
Piping Drafting		3	1	1			1
Plumbing		2	1	1			1

Louisiana, Continued

Task Listing Title (All Were Verified)	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organiza- tions	COVE	Other
Power Line Technician		3	1	1			2
Practical Nursing	1	2	1	1			1
Process Technician	3		1	1			2
Respiratory Therapy Technician		1	1	1			2
Salesmanship (Marketing)	1	7	1	1			1
Structural Drafting	1	3	1	1			1
Surgical Technology		3	2	1			2
Television Production	2		1	1			1
Truck Driving		3		1			1
Upholstering		2	1	1			2
Ward Clerk		2	1	1			1
Welding	1	2	1	1			2

Reason

The occupational/job areas were selected based on input from business/industry, classroom instructors, vocational directors and state staff.

Implementation

The Louisiana curriculum project consists of three phases. The first phase was the adoption of competency based postsecondary curriculum outlines for use in all of the postsecondary vocational-technical schools in the state. Phase II involved the development of instructor's guides for each curriculum and Phase III will be to develop the secondary curriculum guides from the postsecondary guides which will insure articulation between the two programs.

Method

Louisiana's task lists and lists from other states, business/industry, V-TECS and MAVCC were compiled and verified using the SGI technique, mail survey, and interviews with incumbent workers.

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Bricklayer/Trowel Trades +	2/88			X	X				X	X	X	
Building Maintenance Worker (DACUM) +	11/86			X	X				X	X	X	
Building Maintenance Worker +	12/87			X	X				X	X	X	
Business Data Processing (DACUM) +	6/87			X	X				X	X	X	
Executive Secretary - Word Processing Skills (DACUM) +	6/87			X	X				X	X	X	
Heating & Air Conditioning Mechanic	3/88			X	X				X	X	X	
Legal Secretary (DACUM) +	1/87			X	X	X			X	X	X	
Residential Carpenter +	2/88			X	X				X	X	X	
Residential Electrician (DACUM) +	3/87			X	X				X	X	X	

Maryland, Continued

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organiza- tions	COVE	Other
Bricklayer/Trowel Trades	V -- 6						
Building Maintenance Worker (DACUM)	D -- 9						
Building Maintenance Worker (TAP)	V -- 9	V -- 2					
Business Data Processing (DACUM)	D -- 10	D -- 2					
Executive Secretary - Word Processing Skills (DACUM)	D -- 10						
Heating & Air Conditioning Mechanic	V -- 13						
Legal Secretary (DACUM)	D -- 10						
Residential Carpenter	V -- 10	V -- 4					
Residential Electrician (DACUM)	D -- 8						

Reason

The Technical Committee for each occupation, with input from the state staff and Council on Vocational Education, selected the job area.

Implementation

The task list becomes part of a curriculum package containing the task analysis, a competency profile developed from the task list by teachers, state standards and specifications for the program area, an annotated bibliography, resource list, and employability profile.

Method

Maryland uses two methods. The DACUM method was used to develop task lists in the areas of Building Maintenance Worker, Business Data Processing, Executive Secretary-Word Processing Skills, Legal Secretary and Residential Electrician. The Task Analysis Process (TAP), a method adapted from the Structured Group Interview (SGI) was used to verify the V-TECS task lists in the areas of Bricklayer/Trowel Trades, and Heating and Air Conditioning Mechanic; and the V-TECS and Illinois task lists in the areas of Building Maintenance Worker and Residential Carpenter.

Maryland, Continued

Organization

One of the missions of the Technical Committee in Maryland is to establish Occupational Content Committees for each occupational cluster. The committee consists of 8 - 12 people who are workers in the occupation or are direct supervisors. The Content Committee defines/verifies tasks, recommends type and level of knowledge and skills needed, and develops an equipment list.

Massachusetts

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Automotive Technology +	1/87			X	X			X				
Electromechanical Technology	1/88			X								

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organizations	COVE	Other
Automotive Technology	D -- 9 V -- 18	D -- 5 V -- 6	D -- 4 V -- 7	V -- 2			
Electromechanical Technology	D -- 8 V -- 8	D -- 8 V -- 8	D -- 3				

Reason

The Automotive Technology area was selected as a result of a survey of education, labor, business and state government. The Electromechanical Technology selection was made because the State Council wanted to address fiber optics and lasers.

Implementation

The Automotive Technology task list is mailed to the vo-tech teachers. If the task lists are not implemented in a related curriculum the teachers must defend their decision. A team of teachers has been funded to develop a curriculum for the new area of Electromechanical Technology.

Method

The Automotive Technology task listing was developed through committee meetings with vo-tech teachers and by interviews with incumbent workers. The list was then verified by the SGI method. The Electromechanical Technology task list was developed and verified by committee meetings and a mail survey.

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Accounting and Computing	X			X	X	X	X			X	X	*
Agribusiness		X										
Agricultural Mechanics	X			X	X	X	X			X	X	*
Auto Mechanics:	X			X	X	X	X			X	X	*
Automatic Transmissions	X			X	X	X	X			X	X	*
Brakes	X			X	X	X	X			X	X	*
Electrical Systems	X			X	X	X	X			X	X	*
Engine Performance	X			X	X	X	X			X	X	*
Engine Repair	X			X	X	X	X			X	X	*
Heating and Air Conditioning	X			X	X	X	X			X	X	*
Manual Drive Trains and Axles	X			X	X	X	X			X	X	*
Steering and Suspension	X			X	X	X	X			X	X	*
Child Care Aide	X			X	X	X	X			X	X	*
Dental Assistant	X			X	X	X	X			X	X	*
Diesel Mechanics	X			X	X	X	X			X	X	*
Drafting			X									
Electricity/Electronics			X									
Food Service			X									
Heavy Industrial Equipment	X			X	X	X	X			X	X	*
Histology	X			X	X	X	X			X	X	*

* Cognitive and affective skills

Michigan, Continued

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Machine Trades			X									
Marketing			X									
Medical Office Assistant	X			X	X	X	X			X	X	*
Nurse Aide	X			X	X	X	X			X	X	*
Secretarial/Clerical	X			X	X	X	X			X	X	*
Small Engine Repair	X			X	X	X	X			X	X	*
Welding			X									

* Cognitive and affective skills

Committee Representation

Eight to 12 incumbent workers in the occupation serve on each committee.

Reason for Selection

The state staff prioritized the occupation/job area based on length of time from last update of materials, supply and demand of workers/jobs, enrollment data, etc.

Implementation

Task lists are provided that list the essential skills to be included within the curriculum and program.

Method

State-developed, Illinois, V-TECS, IDECC and MODAS task lists were used to develop an initial base list for use by the technical committees. The Structured Group Interview method was used to verify the task lists with the exception of agriculture and business education. The mail survey method was used to verify agriculture task lists and individual interviews with incumbent workers verified the business education lists.

Mississippi

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Agriculture	X			X	X			X			X	
Business and Management +												
Forestry +												
Vocational Ag +												
Allied Health	X											
Basic Vocational Education	X											
Business Technology +	X											
Home Economics	X			X	X			X			X	
Enrichment +												
Occupational +												
Marketing and Coop Vocational Education +	X											

Mississippi, Continued

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organiza- tions	COVE	Other
Agriculture	D -- 30	D -- 30					
Allied Health *							
Basic Vocational Education *							
Business Technology *							
Home Economics	V -- 20	V -- 5	V -- 3				
Marketing & Coop Vocational Education *							

* Information not available

Reason

Selection based on needs assessments and employment data.

Implementation

Task lists are used to standardize curriculum for state-developed curriculum materials and test item banks.

Method

A panel developed the task lists from V-TECS, IDECC, and ODAS task lists. The lists were verified by a mail survey and panel.

Organization

The state of Mississippi has two technical committees: one for vocational programs and one for technical programs. Each technical committee appoints subcommittees. The goal is to standardize curriculum.

Missouri

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Agriculture Construction +	6/86			X	X				X			
Agriculture Machinery +	6/86			X	X				X			
Agriculture Power I and II +	6/86			X	X				X			
Agriculture Science I (supplement) +	6/86			X	X				X			
Agriculture Structures I and II	6/86			X	X				X			
Air Conditioning, Heating & Refrigeration +	6/86			X	X				X			
Auto Body +	6/86			X	X				X			
Auto Mechanics		X		X	X				X			
Building Maintenance		X		X	X				X			
Building Trades +	6/86			X	X				X			
Certified Nursing Aide/Assistant	6/87			X	X				X			
Commercial Art		X		X	X				X			
Cosmetology		X		X	X				X			
Diesel Mechanic	6/87			X	X				X			
Drafting +	6/86			X	X				X			
Electronics +	6/86			X	X				X			
Forest Management, Processing & Marketing Forest Products +	6/86			X	X				X			
Livestock Production, Advanced +	6/86			X	X				X			
Machinist	6/87			X	X				X			
Small Engines		X		X	X				X			
Welding +	6/86			X	X				X			

Missouri, Continued

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Incumbent Workers	Supervisors	Educators	St. Staff	Organiza- tions	COVE	Other
Livestock Production, Advanced		4	8	2			
Agriculture Construction		1	8	2			MO, V-TECS
Agriculture Machinery		1	8	2			
Agriculture Power I and II		1	8	2			
Agriculture Science I (supplement)		4	8	2			
Agriculture Structures I and II		1	8	2			MO, V-TECS
Air Conditioning, Heating & Refrigeration		4	3	3			MO
Auto Body		3	3	3			OK
Auto Mechanics			7	2			Automotive Service Excellence
Building Maintenance			5	2			OK, V-TECS
Building Trades		4	3	3			Bus/Ind., V-TECS
Certified Nursing Aide/Assistant			8	2			Division of Aging
Commercial Art			7	2			OK, Teachers
Cosmetology			11	2			St Bd. of Cosmetology Requirements
Diesel Mechanic		9	5	2			MO
Drafting		7	3	3			V-TECS
Electronics		5	3	3			MO

Missouri, Continued

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Incumbent Workers	Supervisors	Educators	St. Staff	Organiza- tions	COVE	Other
Forest Management, Processing & Marketing Forest Products		5	8	2			
Machinist		6	3	2			MO
Small Engines			7	2			OK, V-TECS
Welding		7	5	3			Bus./Ind., OK V-TECS

Reason

Each occupational area was selected based on a priority determination from state program directors, teachers, and number of enrollees, and review of completeness and accuracy of current listings and/or curriculum.

Implementation

Each task list is utilized to develop instructional analysis, written/mediated curriculum materials, criterion referenced tests, tools/equipment lists, resource references, and statewide computerized student mastery record keeping.

Method

The basic procedures Missouri used was to combine existing task list into a single listing using the DACUM method, then verifying the task lists throughout the state by mail survey. The sources for existing task lists are identified in the Committee Representaion Chart. Otherwise, the task list was developed from scratch.

Nebraska

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Retail Salesperson +	1988			X	X	X						
Telemarketing *	1988			X	X	X						

* Not available

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organizations	COVE	Other
Retail Salesperson	D -- 8		D -- 2	D -- 1			
Telemarketing	D -- 3		D -- 2	D -- 1	D -- 1		

Reason

The selection is based on labor market information and input from representatives of various vocational programs.

Implementation

In the planning stage.

Method

Nebraska has a statewide technical committee advisory group that provides guidance regarding technical committee activity. The task lists are developed using the DACUM method.

New Hampshire

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Business and Office Occupations			X									
Child Care Aide			X									
Health Occupations Core		X		X	X	X			X			
Horticulture		X		X					X		X	

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organizations	COVE	Other
Child Care Aide	1			2			
Health Occupations Core	Plan to	4		1			1
Horticulture	3	1	X	1			Invited

Reason

Selection of the Health Occupations Core was made by committee decision and the State Council selected Child Care Aide. Perceived changes in the necessary skills for employment determined the selection of Business and Office Occupations.

Implementation

The Horticulture task list represents areas of importance and achievement in the curriculum.

Method

Several task lists were located, then verified by a committee using the SGI method to develop the Horticulture list. Task lists for Child Care Aide are being reviewed and Ohio and Illinois task lists for Health Occupations Core have been identified for review.

New Jersey

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components*								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Food Production Management & Service (Fast Foods)			X									
Industrial Machinery Maintenance and Repair			X									

* No information available

Reason

The need was identified through state labor market analysis, technological changes, curricula need and enrollment trends.

Implementation

No information available.

Method

Existing task lists from the District of Columbia, Florida and South Carolina (supplied by the East Central Curriculum Coordination Center) will form the basis for the verification using methods by the Department of Labor.

Committee Representation

Members on the committee will represent workers, supervisors, state staff and the department of labor.

New Mexico

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Child Care	5/86			X	X	X		X	X	X		
Hospitality Education/Food Service	5/86			X	X	X		X	X	X		
Office Technology II	12/85			X	X		X	X	X			

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organizations	COVE	Other
Child Care	D -- 3	D -- 2 V -- 1	V -- 22	D -- 1			
Hospitality Education/Food Service	D -- 2	D -- 2 V -- 1	V -- 15	D -- 1			
Office Technology II	V -- 2	V -- 4		V -- 1			

Reason

Child care was selected because coop programs focus on child care due to high teen pregnancy rate in the state, abuse statistics, local needs assessment, and job placement data. Hospitality Education/Food Service was chosen because Jobs are available in this area and the need assessment from communities/schools defined it as an area of need. Office Technology II was selected by the Technical Committee as the capstone course that prepares the student to make the transition from classroom to workplace.

Implementation

Integrated with lesson plans and new curricula.

Method

Existing task lists (Child Care from Colorado, Oklahoma, New Mexico; Hospitality Education/Food Service from Colorado, Oklahoma and New Mexico; and Office Technology II from Oklahoma and Texas) were compiled. Separate committees developed a task list from the compilation then verified it.

North Carolina

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Data Processing		X		X				X	X			
Masonry		X		X				X	X			

Reason

The need to update curriculum.

Implementation

Curriculum, including competencies, objectives, tests and learning objectives, will be based on task lists.

Method

DACUM method will be used to develop the task lists then teachers will do the verification.

Committee Representation

Information not available.

North Dakota

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Agriculture Sales Occupations +	3/87			X	X			X	X	X		
Automotive Alignment Technician +	3/84			X	X			X	X	X		
Automotive Body Technician +	5/86			X	X			X	X	X		
Automotive Brake Technician +	3/84			X	X			X	X	X		
Automotive Drive Train Technician +	3/84			X	X			X	X	X		
Automotive Electrical Technician +	3/84			X	X			X	X	X		
Automotive Engine Performance Technican +	3/84			X	X			X	X	X		
Automotive Engine Repair Technician +	3/84			X	X			X	X	X		
Bookkeeper/Accountant +	3/85			X	X			X	X	X		
Career Maturity Skills +	3/87			X	X			X	X	X		
Child Care Provider +	5/85			X	X			X	X	X		
Combination Welder +	3/84			X	X			X	X	X		
Commercial Cook +	6/86			X	X			X	X	X		
Computer Operator +	5/86			X	X			X	X	X		
Computer Programmer +	5/85			X	X			X	X	X		
Diesel Technician +	4/87			X	X			X	X	X		
Electronics Technician +	3/84			X	X			X	X	X		
Home Health Aide +	7/86			X	X			X	X	X		
Legal Secretary +	5/87			X	X			X	X	X		
Marketing Occupations Core Skills +	2/85			X	X			X	X	X		

North Dakota, Continued

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Mechanics Tasks for Farmers & Ranchers +	2/86			X	X			X	X	X		
Medical Secretary +	5/87			X	X			X	X	X		
Nursing Assistant +	4/84			X	X			X	X	X		
Office Clerk +	2/85			X	X			X	X	X		
Residential Carpenter +	3/84			X	X			X	X	X		
Secretary +	2/85			X	X			X	X	X		
Small Grain Producer +	3/88			X	X			X	X	X		

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organizations	COVE	Other
Agriculture Sales Occupations	V -- 9						
Automotive Alignment Technician	V -- 4	V -- 1					
Automotive Body Technician	V -- 8	V -- 2					
Automotive Brake Technician	V -- 4	V -- 1					
Automotive Drive Train Technician	V -- 4	V -- 1					
Automotive Electrical Technician	V -- 4	V -- 1					
Automotive Engine Performance Technician	V -- 4	V -- 1					
Automotive Engine Repair Technician	V -- 4	V -- 1					

North Dakota, Continued

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organiza- tions	COVE	Other
Bookkeeper/Accountant	V -- 8	V -- 2					
Career Maturity Skills	V -- 8						
Child Care Provider	V -- 3	V -- 1					
Combination Welder	V -- 5	V -- 1					
Commercial Cook	V -- 4						
Computer Operator	V -- 7						
Computer Programmer	V -- 5						
Diesel Technician	V -- 5	V -- 1					
Electronics Technician	V -- 4	V -- 1					
Home Health Aide	V -- 6	V -- 1					
Legal Secretary	V -- 10						
Marketing Occupations Core Skills	V -- 21	V -- 2					
Mechanics Tasks for Farmers & Ranchers	V -- 10						
Medical Secretary	V -- 11						
Nursing Assistant	V -- 4	V -- 1					
Office Clerk	V -- 10						
Residential Carpenter	V -- 4	V -- 1					
Secretary	V -- 10						
Small Grain Producer	V -- 9						

North Dakota, Continued

Reason

The selection of the occupation/job area for the task is by vote of the Curriculum Project Management Team.

Implementation

The task list is implemented in the curriculum by a curriculum project that inservices teachers with a follow-up by state board supervisors.

Method

Task lists from MAVCC, IDECC, AIT, and CORD are assembled and collapsed into one list which is verified by a panel of incumbent workers and supervisors. North Dakota refers to the method as Modified Delphi.

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Accounting/Computing	1986			X	X					X	X	
Carpentry +	1986			X	X							*
Clerk Stenography	1986			X	X					X	X	
Data Processing	1987			X	X					X	X	
Dental Assisting +	1987			X	X							*
Electrical Trades +	1988			X	X							*
Electronics +	1987			X	X							*
General Merchandising	1986			X	X					X	X	
Masonry +	1987			X	X							*
Small Engine Technician +	1988			X	X							*
Word Processing	1987			X	X					X	X	

* Other components include safety, math, science and communications.

Ohio, Continued

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organiza- tions	COVE	Other
Accounting/Computing	D & V V -- 2	V -- 2	D & V	V -- 1			
Clerk Stenography	D & V V -- 2	V -- 2	D & V	V -- 1			
Data Processing	D & V V -- 5		D & V	V -- 1			
General Merchandising	D & V V -- 5	V -- 2	D & V	V -- 1			
Word Processing	D & V V -- 4	V -- 1	D & V	V -- 1			

Committee Representation

Committees that developed the Carpentry, Dental Assisting, Electronics, Masonry, Electrician and Small Engine Repair Task Lists were composed of employees and supervisors in the occupational area and apprenticeship trainees. Each committee has from five to nine members.

Reason

The choice for Clerk Stenography, Word Processing, Data Processing, Accounting/Computing and General Merchandising was based on employment projections in the occupations with high growth areas receiving priority. The other Task Listing selections were based on student enrollment and/or the scheduled five year revision of the task activity/analysis.

Implementation

The task lists are used by teachers as a basis for developing program curriculum guides (courses of study) to meet college requirements for standard certification and serves as the basis for students' achievement test development.

Method

The state-developed task lists were initially verified by mail surveys to incumbent workers in the specific occupations. The final verification for each task list is done by the technical committee.

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Automotive Service		X		X	X			X	X	X	X	
Catfish Farmer		X		X	X				X	X	X	
Cosmetology		X		X	X			X		X	X	
Financial Services		X		X	X	X	X		X	X	X	
Interdisciplinary Cooperative Education			X	X	X		X			X	X	
Practical Nurse		X		X	X	X			X		X	
Private Investigator	10/86			X	X	X			X			
Respite Care: Basic Core		X		X	X	X			X		X	
Respite Care: Emotionally Disturbed		X		X	X	X			X		X	
Respite Care: Medically Fragile		X		X	X	X			X		X	
Security Guard, Armed and Unarmed	10/86			X	X	X			X			

Oklahoma, Continued

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organiza- tions	COVE	Other
Automotive Service			12	4			
Catfish Farmer	6		2	3			
Cosmetology	9		8	4			
Financial Services	1	2	7	4			
Interdisciplinary Cooperative Education	7		6	5			
Practical Nurse		1	20	3			
Private Investigator	12	2	1	3			
Respite Care: Basic Core	5	2	1	3			Parents
Respite Care: Emotionally Disturbed	8	1		3			Parents
Respite Care: Medically Fragile	10	1		3			Parents
Security Guard, Armed and Unarmed	12	2	1	3			

Note: Information was not available designating the number of representatives involved in the development/verification processes. The above numbers represent the basic technical committees for the specific job areas.

Oklahoma, Continued

Oklahoma's reasons, methods and sources for developing task lists are so divergent, the following table was created to handle the information. The task lists become an integral part of curriculum. They are used to create and define objectives, performance standards, instructional activities and student competencies. They are also used as an outline for writing materials and to modify or update curriculum content. The state's basic method is for existing task lists to be compiled, then verified. Occasionally the task list was developed, then verified.

Task Listing Title	Reason	Method	Task List Source
Automotive Service	Priority by T & I	Mail Survey, SGI	Automotive Service Excellence
Catfish Farmer	State Legislator	SGI	Business/Industry, MS
Cosmetology	Update Cycle	Advisory Committee	
Financial Services	Educators	SGI, Interviews	OK, V-TECS
Interdisciplinary Cooperative Education	T & I Director	Advisory Committee	
Practical Nurse	Update Cycle	Interviews, Group Meeting	OK, V-TECS, ODAS
Private Investigator	Legislative Mandate	SGI	
Respite Care: Basic Core	Community Need	Worker Panel, Interviewing, Shadowing	
Respite Care: Emotionally Disturbed	Community Need	Worker Panel, Interviewing, Group Meeting	
Respite Care: Medically Fragile	Community Need	Interviewing, Group Meeting, Worker Panel	
Security Guard, Armed and Unarmed	Legislative Mandate	Interviews, Literature Review, SGI	

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Accounting +	1/87			X	X			X	X	X	X	
Electronics Technician +	1/88			X	X		X	X			X	
Graphics		X										
Hospitality/Tourism/Recreation +	12/87			X	X	X			X	X	X	
Manufacturing Machining		X										
Marketing		X										
Office Systems		X										

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organizations	COVE	Other
Accounting	V -- 3	V -- 3	V -- 4	V -- 2	V -- 2	V -- 1	
Electronics Technician	V -- 2	V -- 4	V -- 3	V -- 2	V -- 2	V -- 1	
Graphics	V -- 4	V -- 1	V -- 3	V -- 2	V -- 1	V -- 1	
Hospitality/Tourism	V -- 5	V -- 2 to 3	V -- 5	V -- 4	V -- 5		V -- 1
Manufacturing Machining		V -- 7	V -- 3	V -- 2		V -- 1	V -- 1
Marketing	V -- 3	V -- 4	V -- 2	V -- 1	V -- 1	V -- 1	
Office Systems	V -- 4	V -- 2	V -- 3	V -- 1	V -- 1		
Recreation	D -- 3	D -- 1	D -- 3	D -- 1		D -- 1	D -- 1

Oregon, Continued

Reason

Accounting, Graphics, Office Systems, Marketing and Manufacturing Machining were selected due to a need for updated materials. Electronics was a priority area and Hospitality/Tourism/Recreation, a new area of high priority.

Implementation

The task lists for Accounting, Hospitality/Tourism/Recreation, Graphics, Office Systems and Manufacturing Machining form the basis for program standards, approval and recommended curriculum. The Marketing task lists form the basis for program cluster and guidelines. The Electronics task list, which is updated every six months, becomes the V-TECS product.

Method

Verification of existing task lists from V-TECS and MODAS for the areas of Hospitality/Tourism, Graphics and Marketing is accomplished with the Structured Group Interview (SGI) technique. Verification of the V-TECS Accounting, Office Systems and Electronics and the Illinois Manufacturing Machining task lists is also accomplished with SGI. Oregon used the DACUM method to develop the Recreation task list.

Pennsylvania

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Automotive Body Repair +	12/87			X	X							
Automotive Mechanics +	12/87			X	X							
Building Construction Occupations +	4/88			X	X							
Building Trades Maintenance +	4/88			X	X							
Business Data Processing +	1/88			X	X							
Diesel Mechanics +	4/88			X	X							
Electronic Technology +	4/88			X	X							
Food Management, Production, Service +	1/88			X	X							
Graphic Occupations +	1/88			X	X							

Pennsylvania, Continued

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organiza- tions	COVE	Other
Auto Body Repair	V -- 3	V -- 2					
Automotive Mechanics	V -- 3	V -- 2					
Building Construction Occupations	V -- 3	V -- 2					
Building Trades Maintenance	V -- 3	V -- 2					
Business Data Processing	V -- 3	V -- 2					
Diesel Mechanics	V -- 3	V -- 2					
Electronic Technology	V -- 3	V -- 2					
Food Management, Production, Service	V -- 3	V -- 2					
Graphic Occupations	V -- 3	V -- 2					

Reason

Each of the nine programs was selected for duty/task list verification because of the high student enrollment and the availability of existing duty/task lists.

Implementation

For instructor use in improving and updating curriculum. The instructors share the task list with their occupational advisory committee to review and make recommendations for additions and deletions, as necessary, to meet the needs of local employers.

Method

V-TECS and ODAS task lists were compiled to form a basic list, which was reviewed by the technical committee. The list was verified using the mail survey and incumbent worker panel.

Puerto Rico

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Automobile Mechanics	10/86			X	X	X		X		X		
Employability Skills*	86/87											
Ornamental Horticulture	10/86			X	X	X		X		X		
Refrigeration and Air Conditioning	10/86			X	X	X		X		X		

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organizations	COVE	Other
Automobile Mechanics	D -- 5 V -- 5	D -- 3 V -- 3	D -- 4 V -- 4	D -- 3 V -- 3			
Ornamental Horticulture	D -- 5 V -- 5	D -- 3 V -- 3	D -- 4 V -- 4	D -- 3 V -- 3			
Refrigeration and Air Conditioning	D -- 5 V -- 5	D -- 3 V -- 3	D -- 4 V -- 4	D -- 3 V -- 3			

Reason

In accordance with the area of priority and the courses that were being developed in Puerto Rico.

Implementation

The task list is included in each curriculum materials produced related to the occupation.

Method

The lists were developed by combining other states' lists and interviews of workers and teachers. The list was then verified using the Structured Group Interview process, an incumbent worker panel and individual interviews.

* The technical committee prepared an Employability Skills List based on other state-developed task lists. The Illinois task list was basis for the analysis. Personnel representing the Chamber of Commerce, Teachers, Department of Economic Development and Consultants participated in the development process. Representatives of different governmental offices and all the assistant secretaries of the Department of Education were involved in the verification process.

South Carolina

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Agriculture	5/86			X	X			X	X	X		*
Business	5/86			X	X			X	X	X		*
Health	5/86			X	X			X	X	X		*
Home Economics	5/86			X	X			X	X	X		*
Marketing	5/86			X	X			X	X	X		*
Trades and Industry	5/86			X	X			X	X	X		*

* Minimum Program Competencies

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organizations	COVE	Other
All above task listings	D -- 3-8 V -- 1-3	D -- 3-8 V -- 1-4	D -- 3-6 V -- 10 +	D -- 1-6 V -- 1-6	V -- 1-6		D -- 1-3* V -- 1-3*

* Teacher educators

Reason

A task (competency) list was developed for each approved vocational occupational and non-occupational course/program.

Implementation

The task (competency) lists provide the basis for competency based curriculum development, updating and evaluation; criterion-referenced test item development and administration; competency profile development; and development of articulation agreements with local comparable postsecondary education programs.

South Carolina, Continued

Method

In selecting the task lists to verify, results from a mail survey to vocational teachers and administrators, a panel of local and state level technical advisory committees, and information from V-TECS and other research-based materials provided information. Verification of the task lists was accomplished with a mail survey and input from vocational teachers and administrators, educators and local and state advisory committees.

Organization

Technical committee members provide guidance and input, review the annual and three year curriculum priorities, and participate in the field review of all curriculum products.

South Dakota

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Agriculture/Agribusiness/Natural Resources			X									

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organizations	COVE	Other
Agriculture/Agribusiness/Natural Resources	6	2	4	2			

Reason

The occupational area was chosen based on a decision by members of the state technical committee.

Implementation

By updating course to make sure competencies/tasks are included in curriculum.

Method

The DACUM method will be used to develop the task list, which will then be verified by shadowing the worker and with input from a worker panel.

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Electrical/Electronics	1/88							X	X	X		
Health Occupations	1/88							X	X	X		
Office Education	1/88							X	X	X		

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organizations	COVE	Other
Electrical/Electronics		V -- 6	V -- 1				
Health Occupations		V -- 6	V -- 1				
Office Education	V -- 1	V -- 5	V -- 1				

Reason

Each of the occupational areas was selected as a priority area by the State Board of Education.

Implementation

The State Board of Education has approved the lists as required essential elements for the vocational courses.

Method

The state-developed task lists were verified based on the expertise of the committee members.

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Agriculture, Diversified		X		X	X	X			X	X	X	
Agriculture Mechanics		X		X	X	X			X	X	X	
Aircraft Mechanics	5/88			X	X	X			X	X	X	
Auto Body	5/87			X	X	X			X	X	X	
Auto Mechanics	10/86			X	X	X			X	X	X	
Bookkeeping and Accounting	10/86			X	X	X			X	X	X	
Building Trades	4/86			X	X	X			X	X	X	
Culinary Arts	4/87			X	X	X			X	X	X	
Dairy Production	12/86			X	X	X			X	X	X	
Dental Assisting	5/88			X	X	X			X	X	X	
Diesel/Truck Mechanics and Truck Operator	5/88			X	X	X			X	X	X	
Drafting	11/87			X	X	X			X	X	X	
Electronics	3/86			X	X	X			X	X	X	
Forestry/Natural Resources	5/88			X	X	X			X	X	X	
Graphic Arts (Printing)	10/86			X	X	X			X	X	X	
Health Occupations	5/87			X	X	X			X	X	X	
Horticulture		X		X	X	X			X	X	X	
Human Services		X		X	X	X			X	X	X	
Industrial Mechanics	10/87			X	X	X			X	X	X	
Machine Trades	10/86			X	X	X			X	X	X	

Vermont, Continued

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Marketing Education	3/86			X	X	X			X	X	X	
Millwork and Cabinetmaking		X		X	X	X			X		X	
Secretarial/Clerical Office Occupations	4/86			X	X	X			X		X	
Stone Trades	2/88			X	X	X			X		X	
Welding/Metal Fabrication	2/88			X	X	X			X	X	X	

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organizations	COVE	Other
Agriculture, Diversified	V -- 3		V -- 3				
Agriculture Mechanics	V -- 3	V -- 3					
Aircraft Mechanics	V -- 2	V -- 2	V -- 1				
Auto Body	V -- 1	V -- 3					
Auto Mechanics		V -- 4					
Bookkeeping and Accounting	V -- 4						
Building Trades	V -- 3	V -- 3	V -- 1				
Culinary Arts	V -- 4		V -- 1				
Dairy Production	V -- 4			V -- 1			

Vermont, Continued

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organiza- tions	COVE	Other
Dental Assisting	V -- 4	V -- 5					
Diesel/Truck Mechanics and Truck Operator	*	*	*	*	*	*	*
Drafting	V -- 1	V -- 3**					
Electronics	V -- 2	V -- 1	V -- 2				
Forestry/Natural Resources	V -- 2	V -- 3	V -- 1	V -- 4			
Graphic Arts (Printing)	V -- 2	V -- 2					
Health Occupations	V -- 2	V -- 2					
Horticulture	V -- 10***						
Human Services	V -- 2	V -- 2	V -- 1	V -- 3			
Industrial Mechanics	V -- 2	V -- 3					
Machine Trades	V -- 1	V -- 3					
Marketing Education	V -- 1	V -- 4					
Millwork and Cabinetmaking	V -- 1	V -- 3					
Secretarial/Clerical Office Occupations	V -- 1	V -- 4					
Stone Trades	V -- 6	V -- 6					
Welding/Metal Fabrication	V -- 2	V -- 3					

* No information available

** Architect, mechanical, and civil engineers

*** Managerial duties

Vermont, Continued

Reason

The occupation/job areas were selected because existing programs are offered at one or more of the 16 area vocational centers throughout the state.

Implementation

The technical committee product is considered core tasks. The tasks are adopted by the Vermont State Board of Education for implementation by a specific date.

Method

An Instructor's Committee develops a task list using existing lists from Vermont, IDECC, NNCCVTE/NECCC, AND AAVIM, and a modified DACUM technique. The technical committee then verifies the task list by using an incumbent panel and/or local program advisory committee. The State Board of Education gives final approval by adopting the task list as a core.

Task Listing Title (+ Available from IVCC/ECN)	Stage of Development			Product Components								
	Date Completed	In process	On Drawing Board	Duties	Tasks	Importance	Frequency	Sequence	Per. Skills	Basic Skills	Tools	Other
Agricultural Business +	1987			X	X			X			X	
Carpentry +	1988			X	X	X						
Catering +	1987			X	X							
Electronics*	1988			X	X			X		X	X	
Law Enforcement +	1987			X	X							
Plumbing +	1988			X	X	X						
Television Production +	1987			X	X			X			X	

* Not available until the end of the two-year project

Task Listing Title	Committee Representation and Process D = Development V = Verification						
	Workers	Supervisors	Educators	St. Staff	Organizations	COVE	Other
Agricultural Business	V -- 3	V -- 2					
Carpentry							V -- 6 Entrepreneurs
Catering		V -- 1					V -- 5 Entrepreneurs
Electronics	V -- 3	V -- 2					
Law Enforcement		V -- 6					
Plumbing							V -- 6 Entrepreneurs
Television Production		V -- 7					

Virginia, Continued

Reason

Agriculture Business -- revision of existing, dated materials.

Carpentry, Catering, Law Enforcement, Plumbing -- program service area priority.

Electronics -- identified as a priority due to state participation in the National Preservice Electronics Training Project sponsored by the U.S. Army.

Television Production -- a program service area priority and lack of curriculum materials.

Implementation

Agriculture Business -- the task analyses is distributed statewide.

Carpentry -- performance objectives are being developed by carpentry teachers and VVCRC writers.

Catering -- a task analyses guide is scheduled for 1988-89.

Electronics -- task analysis is being field-tested by 40 Virginia electronics instructors.

Law Enforcement -- the task analyses guide for an exploratory course in law enforcement has been developed.

Plumbing -- performance objectives are to be developed by the technical consultant and VVCRC writer.

Television Production -- the task list is developed into a task analyses and distributed to teachers statewide.

Method

Agriculture Business, Electronics -- compiled existing state-developed and V-TECS task lists into one task list which was verified by the SGI method. In addition to the workers and supervisors serving on the panel, an educator was the consultant and three state staff were recorders and facilitators.

The Ag Business end product is a task analysis including performance objectives. The Electronics task list will include the task analyses, available when the two-year project is completed.

Carpentry, Catering, Plumbing -- an existing V-TECS task list for each job area was verified by the SGI method.

Law Enforcement -- the state-developed task list adapted from the Virginia Department of Criminal Justice Services model law enforcement curriculum was verified using the SGI method.

Television Production -- the existing task list that was verified by use of the SGI method was a combination of a state-developed, V-TECS and Virginia DACUM task list.

Appendix

Acronyms

Letter to State Directors

Technical Committee/Task List Survey

Letter to State Liaison Representatives

Acronyms

AAVIM	American Association for Vocational Instructional Materials, 120 Engineering Center, Athens, GA 30602. Develops, publishes and distributes instructional materials primarily in vocational education.
AIT	Agency for Instructional Television, Box A, Bloomington, IN 47402. An agency involved in the development of instructional materials.
CORD	Center for Occupational Research and Development, 601 Lake Air Dr., Waco, TX 76710. Center develops curricula in connection with Federal projects.
COVE	Council on Vocational Education. Mandated by Federal legislation.
DACUM	Developing A CURriculum. An occupational analysis procedure that uses a panel of incumbent workers. Clearinghouse for task listings is located at Humber College, 3199 Lakeshore Blvd., West, Toronto, Ont. M8V 1K8.
DAVTE	Department of Adult and Vocational Technical Education of the Illinois State Board of Education, 100 N. 1st St., Springfield, IL 62777.
ECN	East Central Network. Used to refer to the 12 states of the East Central Network for Curriculum Coordination. The Network is one of six making up the National Network for Curriculum Coordination in Vocational and Technical Education (NNCCVTE).
IDECC	Interstate Distributive Education Curriculum Consortium, 1166 Chesapeake Ave., Columbus, OH 43212. Develops competency based learning systems for the improvement of instruction in distributive education.
IVCC	Illinois Vocational Curriculum Center, Sangamon State University, F-2, Springfield, IL 62794-9243. State curriculum center for Illinois.
MAVCC	Mid-America Vocational Curriculum Consortium, 1515 W. 7th Ave., Stillwater, OK 74074. A 15-state network designed to develop competency based curriculum materials that any one state would not be likely to develop on its own.
MODAS	Michigan Occupational Data Analysis, 101 Wills House, Michigan State University, East Lansing, MI 48824-1050. A computer-based program consisting of a cross-referenced compilation of labor market education data.
NECCC	Northeast Curriculum Coordination Center, New Jersey Department of Education, Division of Voc Ed, Crest Way, Aberdeen, NJ 07747. One of the six curriculum centers making up the NNCCVTE.

NNCCVTE	National Network for Curriculum Coordination in Vocational and Technical Education. A network consisting of six curriculum coordination centers and a state liaison representative (SLR) in each state. Designed to provide an orderly system for sharing curriculum information among vocational educators, teachers, counselors and administrators.
ODAS	Occupational Data Analysis System.
SGL	Structured Group Interview, a technique using incumbent worker panels to verify existing task lists.
T & I	Trade and Industrial.
V-TECS	Vocational-Technical Education Curriculum Consortium of States, 1866 Southern Lane, Decatur, IL 30033-4097.
VVCRC	Virginia Vocational Curriculum and Resource Center, 2200 Mountain Rd., Glen Allen, VA 23060-2208. Virginia's state curriculum center.

Dear Vocational Education Director:

The National Network for Curriculum Coordination in Vocational and Technical Education (NNCCVTE) continues its effort to better serve you. In order to do this and to keep abreast of the state technical committee activities in your state, the East Central Curriculum Coordination Center of the NNCCVTE is working with the Illinois Vocational Curriculum Center to conduct this technical committee/task list survey. We need your cooperation in this project.

In the Fall of 1986, your state participated in a State Technical Committee survey conducted by the East Central Curriculum Coordination Center and the National Alliance of Business (NAB). A copy of the Executive Summary from that report is attached for your information. Since the 1986 survey a lot has happened as a result of the Carl D. Perkins Act's mandate for state technical committees.

The purpose of this survey is to identify the results of the state technical committee work. Please take the few minutes needed to complete this instrument. The survey requests information on all technical committee activities from the time your state started to implement the legislative mandate. The dates requested in item 3 are of utmost importance; please do not neglect to include the dates.

The data gleaned from the survey will be analyzed and compiled in a report. Each State Liaison Representative will receive a copy of the report. The East Central Curriculum Coordination Center plans to disseminate the report to the National Council of Vocational Education, Federal offices, legislators and other appropriate officials/agencies. The report is one way of documenting that the vocational education legislative mandate is being implemented throughout the nation.

Thank you for giving this survey your attention. Your dedication and interest in vocational education are greatly appreciated by us.

Sincerely,
ECN/IVCC Staff

Technical Committee/Task List Survey

INSTRUCTIONS:

Please supply the appropriate information on the survey for each task list or inventory of skills. **A separate form needs to be completed for each task.** If additional copies of the form are required, duplicate the necessary number.

When possible, submit a copy of the completed task list with each completed form.

Return the completed form(s) and task list(s) by April 1, 1988 to Dr. Ruth Patton, ECN/IVCC, F-2, Sangamon State University, Springfield, IL 62794-9243. If you have questions, please call her at 217/786-6163.

Technical Committee/Task List Survey

Person completing the form: _____

(name)

(title)

(address)

Date _____

State _____

Phone No. _____

Definitions used for this survey:

Development of Task List

The task list content is identified without the use of existing task lists, i.e., from "scratch."

Verification/Validation of Task List

The content of an existing task list is determined to be correct for a particular group of workers and a particular job. For purposes of the survey, verify and validate mean the same.

Technical Committee

A state level committee designated by the State Board to carry out the legislative mandate which is "... technical committees shall develop a task list or inventory of skills."

1. Name of task list (occupation/job area): _____

2. How was the occupation/job area for the task list selected? _____

3. What is the task list's stage of development? (Check one)

_____ Completed, give date (month and year) of completion _____

_____ In process

_____ On drawing board

4. Did the technical committee develop the task list without the use of existing task lists?

YES _____ NO _____

5. Please identify the method(s) used by the Technical Committee to develop the task list.

DACUM _____

Shadowing Incumbent workers _____

Mail Survey _____

Interviewing incumbent workers _____

Other (please specify) _____

6. Was the developed task list verified?

YES _____ NO _____

7. Check the method(s) used to verify the developed task list. If more than one method was used, please sequence by placing 1 for first method, etc., in the order used for verification.)

SGL (Structured Group Interview) _____ Shadowing incumbent worker _____
Mail survey _____ Incumbent worker panel _____
Individual Interviews with incumbent workers _____
Others (please specify) _____

8. Please describe the makeup of the committee that developed the task list by supplying the number of members per category.

Incumbent workers in the occupation _____ Educators _____
Supervisors/administrators in the occupation _____ State Staff _____
Other (please specify) _____

If the committee that verified the developed task list is different, please describe the makeup of the committee by supplying the number of members per category.

Incumbent workers in the occupation _____ Educators _____
Supervisors/administrators in the occupation _____ State Staff _____
Other (please specify) _____

9. Did the technical committee verify an existing task list?

YES _____ NO _____

10. Where did the technical committee locate the existing task list they verified?

Business/industry materials _____ Consortium Membership (please check below)
Your state-developed task list _____ V-TECS _____ IDECC _____
Another state's task list _____ MAVCC _____ MODAS _____
(Name of state _____)
Other _____
(please specify)

11. Was an NNCCVTE search used to locate existing task lists? YES _____ NO _____

12. Check the method(s) used to verify the existing task list. If more than one method was used, please sequence by placing 1 for the first method, etc., in the order used for verification.

SGL (Structured Group Interview) _____

Shadowing incumbent worker _____

Mail survey _____

Incumbent worker panel _____

Individual Interviews with incumbent workers _____

Other (please specify) _____

13. Please describe the makeup of the committee that verified the existing task list by supplying the number of members per category.

Incumbent workers in the occupation _____

Educators _____

Supervisors/administrators in the occupation _____

State Staff _____

Other (please specify) _____

14. The end product (task list) includes and/or identifies:

Duty areas of job _____

Basic academic skills/knowledge list _____

Personal skills _____

Frequency of task performance _____

Tool/equipment list _____

Tasks within duty areas _____

Importance of tasks _____

Sequencing simple to complex tasks _____

Other (please specify) _____

15. How is the task list implemented in the curriculum? _____

THANK YOU!

● NNCCVTE

May 24, 1988

MEMORANDUM

EAST CENTRAL REGION

Sangamon State University, F-2
Springfield, IL 62794-9243
217/786-6375

TO: SLRs

FROM: Ruth Patton, ECN Coordinator *Ruth Patton*

RE: State Technical Committee Survey

Did you receive the May 1988 edition of Vocational Education Journal? The issue focuses on the State Technical Committees and has generated a great deal of interest as evidenced by the comments we have received.

The East Central Curriculum Coordination Center/NNCCVTE in conjunction with the Illinois Vocational Curriculum Center is involved with a follow-up report to the 1986 study and is also building a clearinghouse of technical committee task lists. You should have received a survey form in March requesting information on your state's Technical Committee activity. Since I have not yet received a response from you, I am enclosing another survey form.

I know it is time consuming, but please complete the enclosed form and return to me as soon as possible. The report must be completed by the end of November and without your help, it will not be complete.

**INSTRUCTIONS FOR
TECHNICAL COMMITTEE/TASK LIST SURVEY**

Please supply the appropriate information on the survey for each task list or inventory of skills. A separate form needs to be completed for each task list. If additional copies of the form are required, duplicate the necessary number.

When possible, submit a copy of the completed task list with each form.

Return the form(s) and tasks lists(s) as soon as possible to Dr. Ruth Patton, ECN/IVCC, F-2 Sangamon State University, Springfield, IL 627094-9243. If you have questions, please call her at 217/786-6163.